

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 09/155, 676C  
Source: IFW16  
Date Processed by STIC: 12/19/2005

# ***ENTERED***



IFW16

## RAW SEQUENCE LISTING

DATE: 12/19/2005

PATENT APPLICATION: US/09/155,676C

TIME: 09:39:40

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\12192005\I155676C.raw

3 <110> APPLICANT: WALLACH, David  
 4 MALININ, Nikolai  
 5 BOLDIN, Mark  
 6 KOVALENKO, Andrei  
 7 METT, Igor  
 9 <120> TITLE OF INVENTION: MODULATORS OF TNF RECEPTOR ASSOCIATED FACTOR  
 (TRAF), THEIR  
 10 PREPARATION AND USE  
 12 <130> FILE REFERENCE: WALLACH=21  
 14 <140> CURRENT APPLICATION NUMBER: 09/155,676C  
 15 <141> CURRENT FILING DATE: 1999-01-04  
 17 <150> PRIOR APPLICATION NUMBER: PCT/IL97/00117  
 18 <151> PRIOR FILING DATE: 1997-04-01  
 20 <150> PRIOR APPLICATION NUMBER: IL 117800  
 21 <151> PRIOR FILING DATE: 1996-04-02  
 23 <150> PRIOR APPLICATION NUMBER: IL 119133  
 24 <151> PRIOR FILING DATE: 1996-08-26  
 26 <160> NUMBER OF SEQ ID NOS: 23  
 28 <170> SOFTWARE: PatentIn version 3.3  
 30 <210> SEQ ID NO: 1  
 31 <211> LENGTH: 1906  
 32 <212> TYPE: DNA  
 33 <213> ORGANISM: Homo sapiens  
 36 <220> FEATURE:  
 37 <221> NAME/KEY: misc\_feature  
 38 <222> LOCATION: (94)..(94)  
 39 <223> OTHER INFORMATION: n is a, c, g, or t  
 41 <220> FEATURE:  
 42 <221> NAME/KEY: misc\_feature  
 43 <222> LOCATION: (110)..(110)  
 44 <223> OTHER INFORMATION: n is a, c, g, or t  
 46 <220> FEATURE:  
 47 <221> NAME/KEY: misc\_feature  
 48 <222> LOCATION: (115)..(115)  
 49 <223> OTHER INFORMATION: n is a, c, g, or t  
 51 <220> FEATURE:  
 52 <221> NAME/KEY: misc\_feature  
 53 <222> LOCATION: (129)..(129)  
 54 <223> OTHER INFORMATION: n is a, c, g, or t  
 56 <220> FEATURE:  
 57 <221> NAME/KEY: misc\_feature  
 58 <222> LOCATION: (131)..(131)  
 59 <223> OTHER INFORMATION: n is a, c, g, or t  
 61 <220> FEATURE:

(Pg-6)

## RAW SEQUENCE LISTING

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Input Set : A:\sequence\_listing.txt

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62 <221> NAME/KEY: misc_feature
63 <222> LOCATION: (136)..(136)
64 <223> OTHER INFORMATION: n is a, c, g, or t
66 <220> FEATURE:
67 <221> NAME/KEY: misc_feature
68 <222> LOCATION: (202)..(202)
69 <223> OTHER INFORMATION: n is a, c, g, or t
71 <400> SEQUENCE: 1
72 cattgggtca cgcgggtggcg gcgctctaga atagtggatc ccccgggctg caggaattcg      60
W--> 74 attcgaggcc acgaaggccg gcggcgcggc gcangcaccg gcccggggan aggcnccatg      120
W--> 76 agcggatcnc ngaacnatga caaaagacaa tttctgctgg agcgactgct ggatgcagtg      180
W--> 78 aaacagtgcc agatccgctt tngagggaga aaggagattg cctcggattc cgacagcagg      240
80 gtcacctgtc tgtgtgcccc gtttgaagcc gtcctgcagc atggcttgaa gaggagtcca      300
82 ggattggcac tcacagcggc agcgatcaag caggcagcgg gctttgccag caaaaccgaa      360
84 acagagcccg tgttctggta ctacgtgaag gaggtcctca acaagcacga gctgcagcgc      420
86 ttctactccc tgcgccacat cgcctcagac gtgggccggg gtcgcgcctg gctgcgctgt      480
88 gccctcaacg aacactccct ggagcgtac ctgcacatgc tcttgccga ccgctgcagg      540
90 ctgagcactt tttatgaaga ctggtctttt gtgatggatg aagaaaggtc cagtatgctt      600
92 cctaccatgg cagcaggtct gaactccata ctctttgcga ttaacatcga caacaaggat      660
94 ttgaacgggc agagtaagtt tgetcccacc gtttcagacc tcttaaagga gtcaacgcag      720
96 aacgtgacct ccttgctgaa ggagtccacg caaggagtga gcagcctgtt caggagatc      780
98 acagcctcct ctgccgtctc catcctcatc aaacctgaac aggagaccga cccttgccctg      840
100 tcgtgtccag gaatgtcagt gctgatgcca aatgcaaaaa ggagcggaaag aagaaaaaga      900
102 aagtgaccaa cataatctca tttgatgatg aggaagatga gcagaactct ggggacgtgt      960
104 ttaaaaagac acctggggca ggggagagct cagaggacaa ctccgaccgc tctctgtca      1020
106 atatcatgtc cgcttttgaa agcccccttcg ggccctaactc caatggaatc agagcagcaa      1080
108 ctcatggaaa attgattccc tgtctttgaa cggggagttt ggggtaccaga agcttgatgt      1140
110 gaaaagcatc gatgatgaag atgtggatga aaacgaagat gacgtgtatg gaaactcatc      1200
112 aggaaggaag cacaggggcc actcggagtc gcccgagaag ccaactggaag ggaacacctg      1260
114 cctctcccag atgcacagct gggctccgct gaaggtgctg cacaatgact ccgacatcct      1320
116 cttccctgtc agtggcgctg gctcctacag cccagcagat gccccctcg gaagcctgga      1380
118 gaacgggaca ggaccagagg accacgttct cccggtacct ggacttcggt acagtgtgga      1440
120 agccagctct ccaggccacg gaagtccctc gagcagcctg ttacttctgc ctcagtgccca      1500
122 gagtccatga caattagtga actgcgccag gccactgtgg ccatgatgaa caggaaggat      1560
124 gagctggagg aggagaacag atcactgcga aacctgctcg acggtgagat ggagcactca      1620
126 gccgcgctcc ggcaagaggt ggacaccttg aaaaggaagg tggctgaaca ggaggagcgg      1680
128 cagggcataga aggtccaggc gctggccagc tatctttgct attttgtgag gagattctaa      1740
130 cccacagtga gaacctatgt gtggagaaat ggaggagag agaaatccaa cagttcctga      1800
132 tagtctcatt tgagctcctg gatccagtct ttcctgaagc tgtgtttcct ctggactttt      1860
134 catgtatgtg agccaataaa ttgctttcat tccttgaaaa aaaaaa      1906
137 <210> SEQ ID NO: 2
138 <211> LENGTH: 604
139 <212> TYPE: PRT
140 <213> ORGANISM: Homo sapiens
143 <220> FEATURE:
144 <221> NAME/KEY: misc_feature
145 <222> LOCATION: (1)..(1)
146 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
148 <220> FEATURE:

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TIME: 09:39:40

Input Set : A:\sequence\_listing.txt

Output Set: N:\CRF4\12192005\I155676C.raw

149 <221> NAME/KEY: misc\_feature  
150 <222> LOCATION: (6)..(6)  
151 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
153 <220> FEATURE:  
154 <221> NAME/KEY: misc\_feature  
155 <222> LOCATION: (8)..(8)  
156 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
158 <220> FEATURE:  
159 <221> NAME/KEY: misc\_feature  
160 <222> LOCATION: (13)..(13)  
161 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
163 <220> FEATURE:  
164 <221> NAME/KEY: misc\_feature  
165 <222> LOCATION: (15)..(15)  
166 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
168 <220> FEATURE:  
169 <221> NAME/KEY: misc\_feature  
170 <222> LOCATION: (37)..(37)  
171 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
173 <220> FEATURE:  
174 <221> NAME/KEY: misc\_feature  
175 <222> LOCATION: (271)..(271)  
176 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
178 <220> FEATURE:  
179 <221> NAME/KEY: misc\_feature  
180 <222> LOCATION: (274)..(274)  
181 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
183 <220> FEATURE:  
184 <221> NAME/KEY: misc\_feature  
185 <222> LOCATION: (334)..(334)  
186 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
188 <220> FEATURE:  
189 <221> NAME/KEY: misc\_feature  
190 <222> LOCATION: (348)..(348)  
191 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
193 <220> FEATURE:  
194 <221> NAME/KEY: misc\_feature  
195 <222> LOCATION: (354)..(355)  
196 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
198 <220> FEATURE:  
199 <221> NAME/KEY: misc\_feature  
200 <222> LOCATION: (359)..(359)  
201 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
203 <220> FEATURE:  
204 <221> NAME/KEY: misc\_feature  
205 <222> LOCATION: (363)..(363)  
206 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
208 <220> FEATURE:  
209 <221> NAME/KEY: misc\_feature

## RAW SEQUENCE LISTING

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210 <222> LOCATION: (405)..(405)
211 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
213 <220> FEATURE:
214 <221> NAME/KEY: misc_feature
215 <222> LOCATION: (549)..(549)
216 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
218 <220> FEATURE:
219 <221> NAME/KEY: misc_feature
220 <222> LOCATION: (569)..(570)
221 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
223 <400> SEQUENCE: 2
W--> 225 Xaa Thr Gly Pro Gly Xaa Gly Xaa Met Ser Gly Ser Xaa Asn Xaa Asp
      226 1          5          10          15
      229 Lys Arg Gln Phe Leu Leu Glu Arg Leu Leu Asp Ala Val Lys Gln Cys
      230          20          25          30
W--> 233 Gln Ile Arg Phe Xaa Gly Arg Lys Glu Ile Ala Ser Asp Ser Asp Ser
      234          35          40          45
      237 Arg Val Thr Cys Leu Cys Ala Gln Phe Glu Ala Val Leu Gln His Gly
      238          50          55          60
      241 Leu Lys Arg Ser Arg Gly Leu Ala Leu Thr Ala Ala Ala Ile Lys Gln
      242 65          70          75          80
      245 Ala Ala Gly Phe Ala Ser Lys Thr Glu Thr Glu Pro Val Phe Trp Tyr
      246          85          90          95
      249 Tyr Val Lys Glu Val Leu Asn Lys His Glu Leu Gln Arg Phe Tyr Ser
      250          100         105         110
      253 Leu Arg His Ile Ala Ser Asp Val Gly Arg Gly Arg Ala Trp Leu Arg
      254          115         120         125
      257 Cys Ala Leu Asn Glu His Ser Leu Glu Arg Tyr Leu His Met Leu Leu
      258          130         135         140
      261 Ala Asp Arg Cys Arg Leu Ser Thr Phe Tyr Glu Asp Trp Ser Phe Val
      262 145         150         155         160
      265 Met Asp Glu Glu Arg Ser Ser Met Leu Pro Thr Met Ala Ala Gly Leu
      266          165         170         175
      269 Asn Ser Ile Leu Phe Ala Ile Asn Ile Asp Asn Lys Asp Leu Asn Gly
      270          180         185         190
      273 Gln Ser Lys Phe Ala Pro Thr Val Ser Asp Leu Leu Lys Glu Ser Thr
      274          195         200         205
      277 Gln Asn Val Thr Ser Leu Leu Lys Glu Ser Thr Gln Gly Val Ser Ser
      278          210         215         220
      281 Leu Phe Arg Glu Ile Thr Ala Ser Ser Ala Val Ser Ile Leu Ile Lys
      282 225         230         235         240
      285 Pro Glu Gln Glu Thr Asp Pro Cys Leu Ser Cys Pro Gly Met Ser Val
      286          245         250         255
W--> 289 Leu Met Pro Asn Ala Lys Arg Ser Gly Arg Arg Lys Arg Lys Xaa Pro
      290          260         265         270
W--> 293 Thr Xaa Ser His Leu Met Met Arg Lys Met Ser Arg Thr Leu Gly Thr
      294          275         280         285
      297 Cys Leu Lys Arg His Leu Gly Gln Gly Arg Ala Gln Arg Thr Thr Pro
      298          290         295         300

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301 Thr Ala Pro Leu Ser Ile Ser Cys Pro Pro Leu Lys Ala Pro Ser Gly
302 305 310 315 320
W--> 305 Leu Thr Pro Met Glu Ser Glu Gln Gln Leu Met Glu Asn Xaa Phe Pro
306 325 330 335
W--> 309 Val Phe Glu Arg Gly Val Trp Val Pro Glu Ala Xaa Cys Glu Lys His
310 340 345 350
W--> 313 Arg Xaa Xaa Arg Cys Gly Xaa Lys Arg Arg Xaa Arg Val Trp Lys Leu
314 355 360 365
317 Ile Arg Lys Glu Ala Gln Gly Pro Leu Gly Val Ala Arg Glu Ala Thr
318 370 375 380
321 Gly Arg Glu His Leu Pro Leu Pro Asp Ala Gln Leu Gly Ser Ala Glu
322 385 390 395 400
W--> 325 Gly Ala Ala Gln Xaa Leu Arg His Pro Leu Pro Cys Gln Trp Arg Gly
326 405 410 415
329 Leu Leu Gln Pro Ser Arg Cys Pro Pro Arg Lys Pro Gly Glu Arg Asp
330 420 425 430
333 Arg Thr Arg Gly Pro Arg Ser Pro Gly Ser Trp Thr Ser Val Gln Cys
334 435 440 445
337 Gly Ser Gln Leu Ser Arg Pro Arg Lys Ser Ser Glu Gln Pro Val Thr
338 450 455 460
341 Ser Ala Ser Val Pro Glu Ser Met Thr Ile Ser Glu Leu Arg Gln Ala
342 465 470 475 480
345 Thr Val Ala Met Met Asn Arg Lys Asp Glu Leu Glu Glu Glu Asn Arg
346 485 490 495
349 Ser Leu Arg Asn Leu Leu Asp Gly Glu Met Glu His Ser Ala Ala Leu
350 500 505 510
353 Arg Gln Glu Val Asp Thr Leu Lys Arg Lys Val Ala Glu Gln Glu Glu
354 515 520 525
357 Arg Gln Gly Met Lys Val Gln Ala Leu Ala Ser Tyr Leu Cys Tyr Phe
358 530 535 540
W--> 361 Val Arg Arg Phe Xaa Pro His Val Arg Thr Met Trp Trp Arg Asn Gly
362 545 550 555 560
W--> 365 Gly Arg Glu Lys Ser Asn Ser Ser Xaa Xaa Ser His Leu Ser Ser Trp
366 565 570 575
369 Ile Gln Ser Phe Leu Lys Leu Cys Phe Leu Trp Thr Phe His Val Cys
370 580 585 590
373 Glu Pro Ile Asn Cys Phe His Ser Leu Lys Lys Lys
374 595 600
377 <210> SEQ ID NO: 3
378 <211> LENGTH: 2631
379 <212> TYPE: DNA
380 <213> ORGANISM: Homo sapiens
383 <220> FEATURE:
384 <221> NAME/KEY: misc_feature
385 <222> LOCATION: (1081)..(1081)
386 <223> OTHER INFORMATION: n is a, c, g, or t
388 <220> FEATURE:
389 <221> NAME/KEY: misc_feature
390 <222> LOCATION: (1102)..(1102)

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**RAW SEQUENCE LISTING ERROR SUMMARY**  
**PATENT APPLICATION: US/09/155,676C**

DATE: 12/19/2005  
 TIME: 09:39:41

Input Set : A:\sequence listing.txt  
 Output Set: N:\CRF4\12192005\I155676C.raw

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220>

to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 94, 110, 115, 129, 131, 136, 202  
 Seq#:2; Xaa Pos. 1, 6, 8, 13, 15, 37, 271, 274, 334, 348, 354, 355, 359, 363, 405, 548, 569  
 Seq#:2; Xaa Pos. 570  
 Seq#:3; N Pos. 1081, 1102, 1120, 1125, 1129, 1135, 1146, 1170, 1180, 1188, 1208, 1239  
 Seq#:3; N Pos. 1248, 1249, 1278, 1297, 1310, 1322, 1345, 1409, 1423, 1445, 1452, 1459  
 Seq#:3; N Pos. 1478, 1498, 1507, 1508, 1520, 1534, 1540, 1546, 1557, 1713, 1895, 1900  
 Seq#:3; N Pos. 1934, 1942, 1951, 1962, 1967, 1974, 1984, 1988, 1994, 2005, 2012, 2024  
 Seq#:3; N Pos. 2030, 2044, 2059, 2067, 2090, 2098, 2099, 2107, 2113, 2119, 2128, 2136  
 Seq#:3; N Pos. 2143, 2148, 2165, 2172, 2192, 2206, 2220, 2221, 2226, 2245, 2253, 2294  
 Seq#:3; N Pos. 2327, 2427  
 Seq#:4; N Pos. 53  
 Seq#:5; Xaa Pos. 18, 320, 338, 356, 358, 388

**Invalid <213> Response:**

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:8,9,10,11,21,22

## VERIFICATION SUMMARY

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Input Set : A:\sequence listing.txt

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L:74 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:60  
L:76 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:120  
L:78 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:180  
L:225 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0  
L:233 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:32  
L:289 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:256  
L:293 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:272  
L:305 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:320  
L:309 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:336  
L:313 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:352  
L:325 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:400  
L:361 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:544  
L:365 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:560  
L:770 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:1080  
L:772 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:1140  
L:774 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:1200  
L:776 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:1260  
L:778 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:1320  
L:780 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:1380  
L:782 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:1440  
L:784 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:1500  
L:790 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:1680  
L:796 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:1860  
L:798 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:1920  
L:800 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:1980  
L:802 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:2040  
L:804 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:2100  
L:806 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:2160  
L:808 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:2220  
L:810 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:2280  
L:814 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:2400  
L:835 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0  
L:920 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:16  
L:992 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:304  
L:1000 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:336  
L:1004 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:352  
L:1012 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:384